

**AMENDMENTS TO THE CLAIMS:**

Amend the claims as follows:

Claims 1-17. (Canceled)

18. (Currently Amended) A method of treating multiple sclerosis (MS) comprising administering at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulfan and/or derivatives thereof~~ to a person in need of such treatment, said method not comprising stem cell transplantation.

Claim 19. (Canceled)

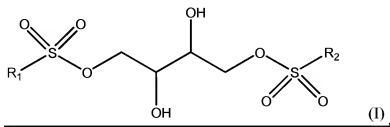
20. (Currently Amended) A method of treating multiple sclerosis (MS) comprising administering at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulfan and/or derivatives thereof~~ to a person in need of such treatment, wherein administration of said at least one compound ~~treosulfan and/or derivatives thereof~~ leads to an improvement of the ambulation index of said person, said method not comprising stem cell transplantation.

21. (Previously Presented) The method of claim 18, wherein said MS is a relapsing-remitting, primary progressive or secondary progressive MS.

Claim 22. (Canceled)

23. (Previously Presented) The method of claim 20, wherein said MS is a relapsing-remitting, primary progressive or secondary progressive MS.

24. (Currently Amended) A method of treating multiple sclerosis (MS) comprising administering at least one compound of formula (I) to a person in need of such treatment, said method not comprising stem cell transplantation, wherein

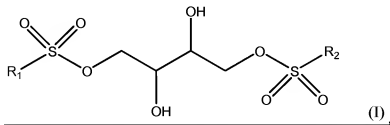


wherein R<sub>1</sub> and R<sub>2</sub> are the same or different and are a linear C<sub>1-7</sub> alkyl or a C<sub>3-7</sub> branched alkyl

~~The method of claim 18, wherein said derivatives thereof are selected from the group consisting of busulphan, dimethyl busulphan, pentasulphan or hepsulphan.~~

Claim 25. (Canceled)

26. (Currently Amended) A method of treating multiple sclerosis (MS) comprising administering at least one compound of formula (I) to a person in need of such treatment, wherein administration of said at least one compound leads to an improvement of the ambulation index of said person, said method not comprising stem cell transplantation, wherein



wherein R<sub>1</sub> and R<sub>2</sub> are the same or different and are a linear C<sub>1-7</sub> alkyl or a C<sub>3-7</sub> branched alkyl

~~The method of claim 20, wherein said derivatives thereof are selected from the group consisting of busulphan, dimethyl busulphan, pentasulphan or hepsulphan.~~

27. (Currently Amended) The method of claim 18, wherein said at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulphan and/or derivatives thereof are~~is administered in the amount of 1 to 10 grams ~~of treosulphan and/or treosulphan derivative~~ per m<sup>2</sup> of body surface.

Claim 28. (Canceled)

29. (Currently Amended) The method of claim 20, wherein said at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulphan and/or derivatives thereof are~~is administered in the amount of 1 to 10 grams ~~of treosulphan and/or treosulphan derivative~~ per m<sup>2</sup> of body surface.

30. (Currently Amended) The method of claim 27, wherein said at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulphan and/or derivatives thereof are~~is administered in the amount of 3 to 9 grams per m<sup>2</sup> of body surface.

Claim 31. (Canceled)

32. (Currently Amended) The method of claim 29, wherein said at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulphan and/or derivatives thereof are~~ is administered in the amount of 3 to 9 grams per m<sup>2</sup> of body surface.

33. (Currently Amended) The method of claim 27, wherein said at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulphan and/or derivatives thereof are~~ is administered in the amount of 5 to 8 grams per m<sup>2</sup> of body surface.

Claim 34. (Canceled)

35. (Currently Amended) The method of claim 29, wherein said at least one compound selected from the group consisting of treosulfan, busulfan, dimethyl busulfan, pentasulfan and hepsulfam ~~treosulphan and/or derivatives thereof are~~ is administered in the amount of 5 to 8 grams per m<sup>2</sup> of body surface.

36. (Currently Amended) The method of claim 18, wherein said method further comprises administration of at least one of interferon- $\beta$  and glatiramer acetate ~~amino immunomodulatory effective substance~~.

Claim 37. (Canceled)

38. (Currently Amended) The method of claim 20, wherein said method further comprises administration of at least one of interferon- $\beta$  and glatiramer acetate ~~amino immunomodulatory effective substance~~.

39. (Currently Amended) The method of claim 24, wherein said method further comprises administration of at least one of interferon- $\beta$  and glatiramer acetate ~~36,~~

~~wherein said immunomodulatory effective substance is interferon- and/or glatiramer acetate.~~

Claim 40. (Canceled)

41. (Currently Amended) The method of claim 26, wherein said method further comprises administration of at least one of interferon- $\beta$  and glatiramer acetate ~~38,~~  
~~wherein said immunomodulatory effective substance is interferon- and/or glatiramer acetate.~~

42. (Previously Presented) The method according to claim 18, wherein said administering comprises administration of infusion solution or an oral formulation.

Claim 43. (Canceled)

44. (Previously Presented) The method according to claim 20, wherein said administering comprises administration of infusion solution or an oral formulation.

45. (new) The method of claim 24, wherein said MS is a relapsing-remitting, primary progressive or secondary progressive MS.

46. (new) The method of claim 26, wherein said MS is a relapsing-remitting, primary progressive or secondary progressive MS.

47. (new) The method of claim 24, wherein said at least one compound is administered in the amount of 1 to 10 grams per  $m^2$  of body surface.

48. (new) The method of claim 26, wherein said at least one compound is administered in the amount of 1 to 10 grams per  $m^2$  of body surface.

49. (new) The method of claim 48, wherein said at least one compound is administered in the amount of 3 to 9 grams per  $m^2$  of body surface.

50. (new) The method of claim 48, wherein said at least one compound is administered in the amount of 3 to 9 grams per  $\text{m}^2$  of body surface.

51. (new) The method of claim 47, wherein said at least one compound is administered in the amount of 5 to 8 grams per  $\text{m}^2$  of body surface.

52. (new) The method of claim 48, wherein said at least one compound is administered in the amount of 5 to 8 grams per  $\text{m}^2$  of body surface.

53. (new) The method of claim 24, wherein said method further comprises administration of at least one of interferon- $\beta$  and glatiramer acetate .

54. (new) The method of claim 26, wherein said method further comprises administration of at least one of interferon- $\beta$  and glatiramer acetate.

55. (new) The method according to claim 24, wherein said administering comprises administration of infusion solution or an oral formulation.

56. (new) The method according to claim 26, wherein said administering comprises administration of infusion solution or an oral formulation.